

dustries. is the transfer of coal and natural gas from one mining establishment to another for use as power or heat. The total value of such fuels transferred in 1963 for use in all mineral industries. however. was only \$76 million. or less than 0.4 percent of the gross value of shipments for all mineral industries.

Table G shows. for major industry groups. gross shipments and two approximate computations of net shipments: the first. adjusted only for the transfer of minerals from one establishment to another for preparation and for purchases for resale without preparation. and the second. adjusted also by exclusion of all receipts for contract work. This second adjustment. for the reasons indicated above. is made only in table G of the 1963 census reports.

27. VALUE ADDED IN MINING

For 1963. 1958. and 1954. this measure is computed by subtracting the cost of supplies. minerals received from other establishments for preparation. purchased fuels and electric energy. contract work. and purchased machinery installed from the value of shipments and receipts and capital expenditures. This statistic avoids the duplication in value of shipments which results from the use of products of some establishments as supplies. energy sources, or materials by others. Moreover.

it provides a measure of value added not only in mineral production. but also in the development of mineral properties. For these reasons. it is considered to be the best value measure for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments and receipts" used in this calculation. includes the shipments of all products of the mining establishment. together with receipts for work done for others. "Capital expenditures" includes expenditures for development of mineral

properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The "costs used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

For 1939 and earlier years comparable data are not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of shipments and receipts the cost of supplies, minerals received for preparation, fuels purchased electric energy and contract work.

Value added in mining differs from "national income originating in mining" as presented in the national income estimates compiled by the Office of Business Economics, Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production. It excludes, in addition to cost of materials, such costs as depreciation charges, State and local taxes (other than corporate income taxes), allowance for bad debts, and purchases of services from other economic sectors, such as contract services classified in other sectors, services of engineering and management consultants, advertising, telephone and telegraph expenses, insurance, royalties, etc. It is, therefore, a more "net" concept for

value added in mineral production than that used in the minerals census. On the other hand, the OBE figures do not include a measure of value added in development of mineral properties.

28. ENERGY USED

The 1963 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable in general, to such data obtained in the 1958, 1954, 1939, 1929, and 1919 censuses. Separate quantity and cost figures were provided on purchased coal, distillate fuel oil, residual fuel oil, gas, gasoline, and electric energy. A cost figure was obtained for other fuels. The breakdown between distillate and residual fuel oil for 1963 is being published for most industries for the first time; the gasoline figures were collected for the first time since 1939.

To supplement the data on energy and materials purchased, data were obtained on the quantity of such items produced and used at the same establishment. In the minerals census, such

Table G. GROSS AND APPROXIMATE NET SHIPMENTS BY MAJOR INDUSTRY GROUP: 1963

Industry group	Gross shipments (million dollars)	Net shipments (million dollars)	
		Adjusted for transfer of minerals ¹	Adjusted for transfer of minerals and for contract work ²
Air transportation	21,621	18,804	16,964
Bituminous coal and lignite mining	2,128	1,836	1,800
.....	237	172	156
.....	2,396	2,101	2,075
.....	14,512	12,423	10,686
.....	2,347	2,273	3,247

^{1,2} Adjusted also to exclude duplication of minerals transferred to other establishments in the same industry for resale without preparation.